

FIG. 1
(PRIOR ART)

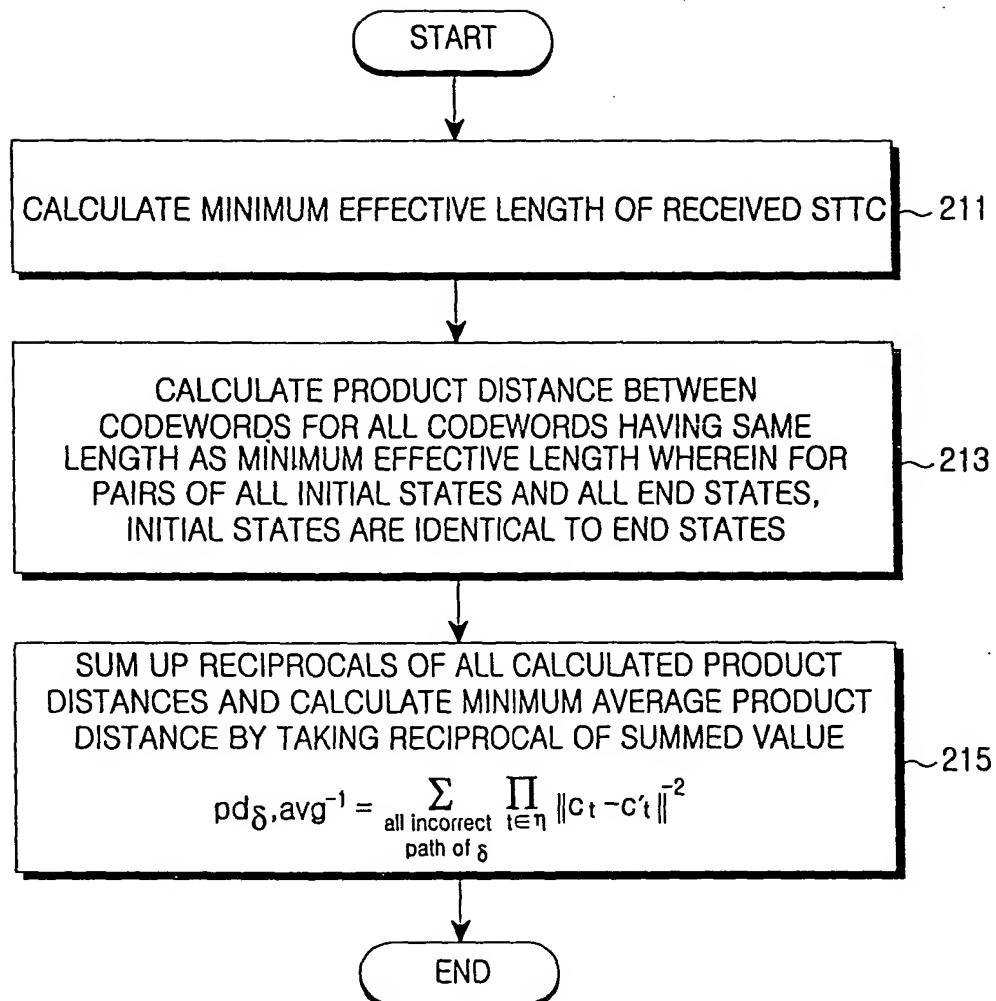


FIG.2

Code	δ_{\min}	pd_{\min}	$pd_{\min,avg}$	Coding gain over Tarokh
Tarokh	2	4	1.77	0 dB
Firmanto	2	24	8.73	3.47 dB
Ungerboeck with STBC	2	16	16.00	4.78 dB
Divsalar with STBC	4	16	7.76	-

FIG.3

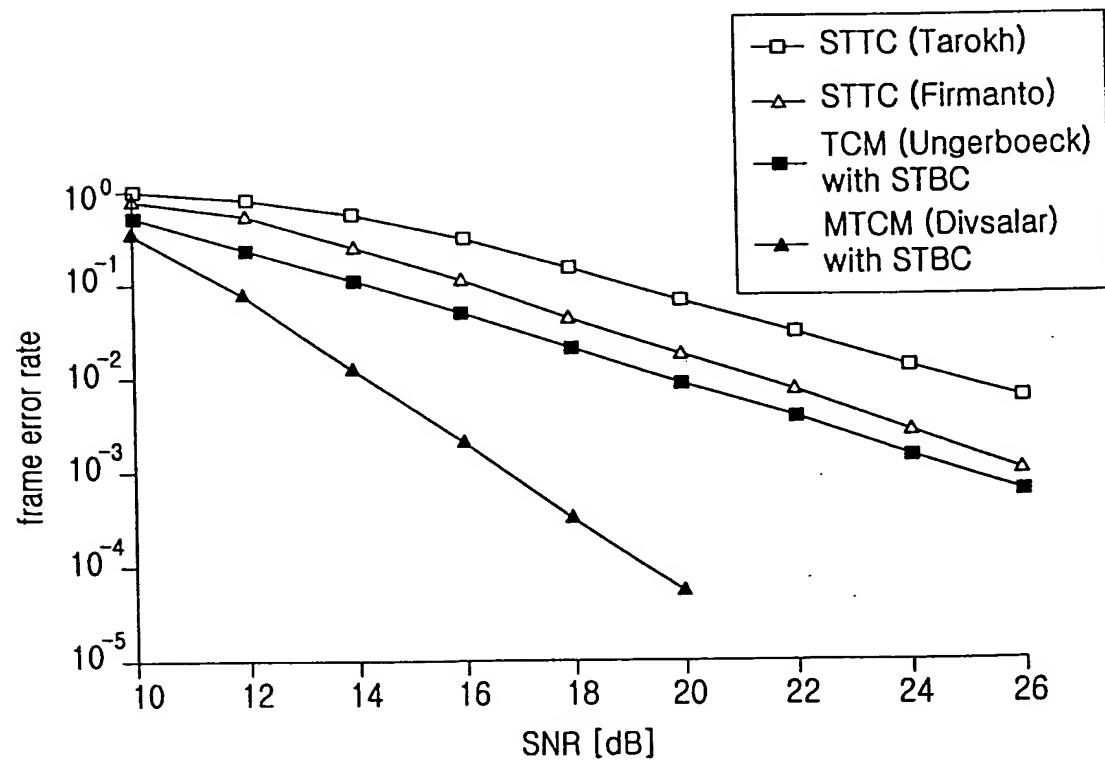


FIG.4

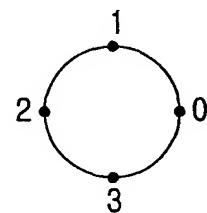
4state

00 12 20 32

02 10 22 30

23 31 03 11

21 33 01 13



4-PSK Constellation

FIG.5

8state

00 20 12 32

01 21 13 33

22 02 30 10

23 03 31 11

02 22 10 30

03 23 11 31

20 00 32 12

21 01 33 13

FIG.6

16state

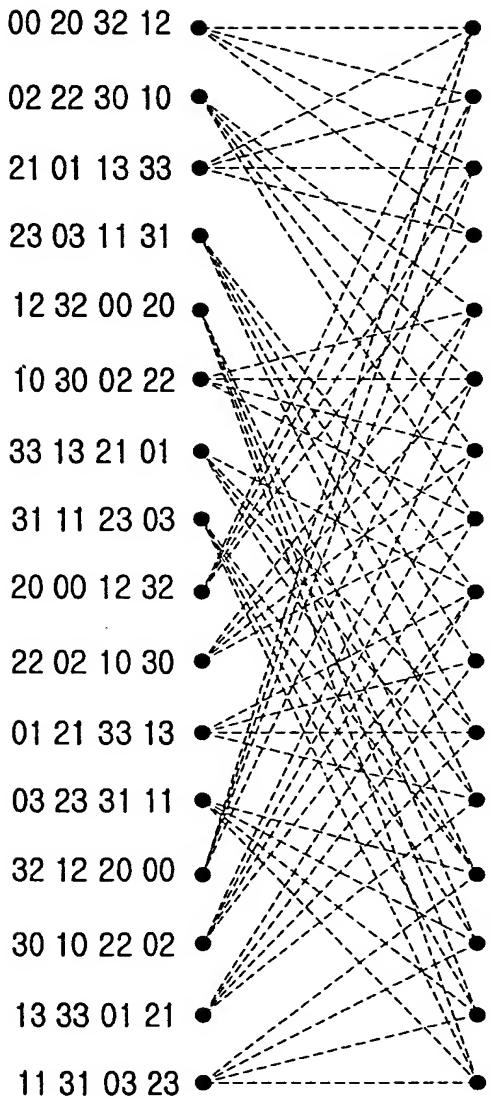


FIG.7

STTC	Effective length	Minimum product distance	Minimum average product distance
4-STATE	Tarokh	2	4
	Firmanto	2	24
8-STATE	INVENTION	2	24
	Tarokh	2	16
16-STATE	Firmanto	2	48
	INVENTION	2	48
	Tarokh	3	16
	Firmanto	3	64
	INVENTION	3	64
			11.37

FIG.8

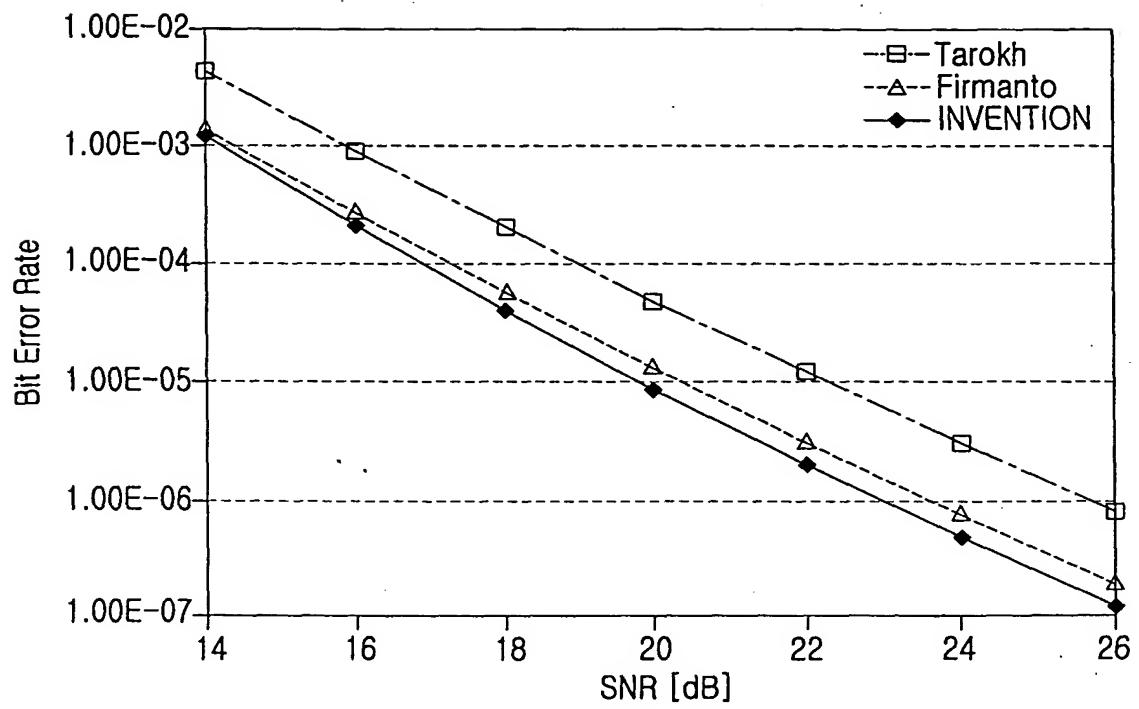


FIG.9